DETAILED ACTION

Response to Amendment

1.   This Office Action is in response to Amendment filed on 4/14/08.

Claim Rejections - 35 USC § 112

2.   The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1 and 16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The limitation "sequentially performing a cell search… **and a frequency band allocated to each service vendor**" is not disclosed in the specification or drawings.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4.   Claims 1-2, 5-7, and 9 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Krishnan (US 2002/0168976 A1) in view of Hooper et al. (US

5,734,980) and further in view of Chao et al. (US 2005/0153696 A1).

Regarding claim 1, Krishnan discloses a frequency searching method

comprising:

receiving system information from a network (the system information is received

in form of static table 110, which is transferred from a base station to the device 100 -

page 3, paragraph 0027, lines 32-38) (the system information or static table 110

includes roaming list and lookup table - paragraph 0014), wherein the received system

information comprises frequency information of service vendors (Krishnan, e.g.

"Airtouch" or "Sprint" - paragraph 0009) (the SID and NID identify respective service

vendors, e.g. "Airtouch" or "Sprint", as disclosed in paragraph 0009, and the system

information/static table 110 includes SID and NID for respective frequency/channel

(220), as exhibited in Figure 3; therefore, the received system information relates to

frequency bands of use for each of the service vendors) (system information/static table

110 includes usage frequency/block or channel number which is indicative of frequency

of transmission/usage frequency - paragraph 0010); and

obtaining usage frequencies (220) of service vendors (e.g. "Airtouch" or "Sprint"-

paragraph 0009) from the received system information (system information/static table

110 includes usage frequency/block or channel number which is indicative of frequency

of transmission/usage frequency - paragraph 0010) (because SID and NID identify

respective service vendors, e.g. "Airtouch" or "Sprint", as disclosed in paragraph 0009,

and the system information/static table 110 includes SID and NID for respective

frequency/channel (220), as exhibited in Figure 3; therefore, each of the obtained

frequencies correspond to a frequency band of use for respective service vendors as

claimed); and

storing the obtained usage frequencies of service vendors in memory of user

equipment (paragraph 27, stored in memory 108 of device 100).

Krishnan does not disclose sequentially performing a cell search by scanning the

stored usage frequencies and a frequency band allocated to each service vendor,

wherein the cell search is preferentially performed about the stored usage frequencies

of the service vendors, and then performed about all frequency band allocated to each

service vendor when a requested frequency is not found when searching the stored

frequencies of the service vendors.

Hooper et al. further disclose sequentially performing a cell search by scanning

the stored usage frequencies and a frequency band allocated to each service vendor

(Fig. 2, steps 70-74 and paragraph 27, cell search is performed based on a table

received from a BS so the table must be received first before starting the cell search);

and

wherein the cell search is preferentially performed about the stored usage

frequencies of the service vendors, and then performed about all frequency band

allocated to each service vendor when a requested frequency is not found when

searching the stored frequencies of the service vendors (col. 7, lines 22-30 and 61-64,

as the applicant stated, if the mobile terminal 60 fails to detect a transmission, then the

method proceeds to step 96 where a next frequency of a list 64 (a specific frequency) is

scanned. In other words, Hooper specifically teaches that a next frequency in the list 64

is subsequently scanned).

Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to utilize the teachings of Hooper et al. into the teachings

of Krishnan for the purposes of enhancing system selectivity capabilities (col. 13, lines

51-53).

Krishnan and Hooper et al. do not disclose the system information is received

from the network through a Radio Resource Control of a UMTS Terrestrial Radio

Access Network.

Chao et al. further disclose the system information is received from the network

through a Radio Resource Control of a UMTS Terrestrial Radio Access Network

(paragraph 20 and 13-16, broadcast control channel system information is received

from UTRAN).

Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to utilize the teachings of Chao et al. into the teachings of

Krishnan and Hooper et al. for the purposes of reducing UE processing/battery

consumption (paragraph 41).

Regarding claim 2, Krishnan and Hooper et al. and Chao et al. disclose

everything claimed as applied above (see claim 1). In addition, the system information

(static table / roaming list / lookup table) is received by a mobile communication terminal

(device 100) from the network (base station) (Krishnan, paragraph 0027, lines 32-38).

Regarding claim 5, Krishnan and Hooper et al. and Chao et al. disclose

everything claimed as applied above (see claim1). In addition, receiving the system

information comprises receiving the system information in a system information block

(Krishnan, the explained table is a system information block - paragraph 0027,lines 32-

38).

Regarding claim 6, Krishnan and Hooper et al. and Chao et al. disclose

everything claimed as applied above (see claim 5). In addition, transmitting the system

information block including the usage frequency of each service vendor (Krishnan, e.g.

"Airtouch" or "Sprint" - paragraph 0009).

Consider claim 7. Chao et al. further disclose wherein the system information is

received from the network through a broadcast control channel (paragraph 20 and 13-

16, system information is transmitted in a broadcast control channel).

Regarding claim 9, Krishnan and Hooper et al. and Chao et al. discloses

everything claimed as applied above (see claim 1). In addition, updating stored

frequencies based on the received system information from the network (Krishnan,

paragraph 0027, lines 32-38).

5.   Claims 16, 19-20, and 22 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Krishnan (US 2002/0168976 A1) in view of Hooper et al. (US

5,734,980) and further in view of Chao et al. (US 2005/0153696 A1).

Regarding claim 16, Krishnan discloses a mobile communication apparatus

(device   100- Figure 2; paragraphs 0025-0027) comprising:

a receiving device (receiver 104 - Figure 2) to receive system information (the

system information is received in form of static table 110, which is transferred from a

base station to the device 100- page 3, paragraph 0027, lines 32-38) (the system

information or static table 110 includes roaming list and lookup table- paragraph 0014),

wherein the received system information comprises frequency information of service

vendors (Krishnan, e.g. "Airtouch" or "Sprint" - paragraph 0009) (the SID and NID

identify respective service vendors, e.g. "Airtouch" or "Sprint", as disclosed in paragraph

0009, and the system information/static table 110 includes SID and NID for respective

frequency/channel (220), as exhibited in Figure 3; therefore, the received system

information relates to frequency bands of use for each of the service vendors) (system

information/static table 110 includes usage frequency/block or channel number which is

indicative of frequency of transmission/usage frequency - paragraph 0010); and

a memory (memory 108 - Figure 2) to store (paragraph 0027) usage frequencies

of service vendors obtained from the received system information and a frequency band

allocated to each service vendor (e.g. "Airtouch" or "Sprint" - paragraph 0009) (the SID

and NID identify respective service vendors, e.g. "Airtouch" or "Sprint", as disclosed in

paragraph 0009, and the system information/static table 110 includes SID and NID for

respective frequency/ channel (220), as exhibited in Figure 3; therefore, the received

system information relates to frequency bands of use for each of the service vendors);

and

Krishnan does not disclose sequentially perform a cell search by scanning the stored usage frequencies and a frequency band allocated to each service vendor, wherein the processing device preferentially performs the cell search about the stored usage frequencies of the service vendors, and then performs about all frequency band allocated to each service vendor when a requested frequency is not found when searching the stored frequencies of the service vendors.

Hooper et al. further disclose sequentially perform a cell search by scanning the stored usage frequencies and a frequency band allocated to each service vendor (Fig. 2, steps 70-74 and paragraph 27, cell search is performed based on a table received from a BS so the table must be received first before starting the cell search);

wherein the processing device preferentially performs the cell search about the stored usage frequencies of the service vendors, and then performs about all frequency band allocated to each service vendor when a requested frequency is not found when searching the stored frequencies of the service vendors (col. 7, lines 22-30 and 61-64, as the applicant stated, if the mobile terminal 60 fails to detect a transmission, then the method proceeds to step 96 where a next frequency of a list 64 (a specific frequency) is scanned. In other words, Hooper specifically teaches that a next frequency in the list 64 is subsequently scanned).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Hooper et al. into the teachings

of Krishnan for the purposes of enhancing system selectivity capabilities (col. 13, lines 51-53).

Krishnan and Hooper et al. do not disclose the system information is received from the network through a Radio Resource Control of a UMTS Terrestrial Radio Access Network.

Chao et al. further disclose the system information is received from the network through a Radio Resource Control of a UMTS Terrestrial Radio Access Network (paragraph 20 and 13-16, broadcast control channel system information is received from UTRAN).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Chao et al. into the teachings of Krishnan and Hooper et al. for the purposes of reducing UE processing/battery consumption (paragraph 41).

Regarding claim 19, Krishnan and Hooper e al. and Chao et al. discloses everything claimed as applied above (see claim 16). In addition, the receiving device receives the system information in a system information block (Krishnan, the explained table is a system information block - paragraph 0027, lines 32-38).

Consider claim 20. Chao et al. further disclose wherein the receiving device receives the system information is received from the network through a broadcast control channel (paragraph 20 and 13-16, system information is transmitted in a broadcast control channel).

Regarding claim 22, Krishnan and Hooper e al. and Chao et al. discloses

everything claimed as applied above (see claim 16). In addition, the processing device

updates stored frequencies in the memory based on received system information from

the network (Krishnan, paragraph 0027, lines 32-38).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37

CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Justin Y. Lee whose telephone number is (571) 272-

5258. The examiner can normally be reached on M - Thu   7:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Duc Nguyen can be reached on 571-272-7503. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Justin Lee
AU 2617
4/14/08

/Duc Nguyen/

Supervisory Patent Examiner, Art Unit 2617